Building Wisconsin's transportation network

A decade of progress points 'forward' to the future

Wisconsin Department of Transportation

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A decade of progress points 'forward' to the future

Transportation is an issue of crucial importance to the future of Wisconsin. We have a long history of solid investment in our state to ensure high quality in our highways, airports, railroads, harbors, transit systems and other facilities and services.

Our competitiveness in an electronic, global economy is dependent on an effective transportation network. We must continue to seek efficient solutions to our congestion, mobility and preservation needs through a variety of modes and services. We must also ensure that our financing of transportation is adequate to meet our existing and future needs.

This publication provides an overview of our progress in transportation and the future challenges we face. I commend the Department of Transportation for its fine work over the past decade and more, and look forward to working with the entire transportation community to ensure that Wisconsin's transportation system remains second to none.

Governor Scott McCallum
State of Wisconsin

Governor Scott McCallum

Our transportation infrastructure is the foundation of our lives. In Wisconsin, we enjoy remarkable freedom, a high quality of life, and tremendous economic opportunity because our state and local leaders have joined together to develop a top-notch transportation system.

More important than concrete, asphalt and steel, however, are the people that provide and maintain the transportation network. I am proud of all the men and women that make up the department. They work closely with all customers of transportation and a vast array of partner agencies to provide innovative solutions and exceptional service.

I have a lifelong career in transportation, and I love what I do. Through this publication, I hope to share with you both my pride and passion in how the Department of Transportation serves Wisconsin.

Terry Mulcahy, Secretary
Wisconsin DOT

Secretary Terry Mulcahy

Transportation touches everyone

Transportation is not only important for the movement of goods and people – it is also a key component of our overall quality of life. An efficient, effective network of transportation infrastructure and services helps make Wisconsin a great place to live, work and visit.

But there many different aspects of transportation -- it is more than just a road or runway. Quality transportation means different things to different people, but above all it must have a human element:

- It's the quick and attentive service provided from the Motor Vehicle counter staff;
- It's the comforting presence of the State Patrol officer coming to the aid of a motorist, or talking with students about safety.
- It's the engineer who takes the time to develop new and innovative designs to preserve the social fabric of a neighborhood;
- It's the many public and private sector partners who work with the department to deliver quality transportation.

Who we are

Serving a unique role

The Wisconsin Department of Transportation is unique among counterparts in other states, in that the range of transportation issues under its jurisdiction is vast. The department is responsible for developing and maintaining the infrastructure and all modes of transportation, preserving the environment, enforcing traffic laws on state highways, testing drivers and registering vehicles, financing transportation needs at the state and local levels, and promoting transportation safety in all its forms.

The department also faces workplace issues common to any major business: technology, financing, customer service, efficiency, partnerships and productivity.

Yet through it all, the vision of the department and its staff remain solid: "dedicated people creating transportation solutions through innovation and exceptional service."

A corporate structure to meet needs

To efficiently meet the variety of needs and issues that transportation presents in Wisconsin, the department is organized into seven divisions.

1. The ***Executive Offices*** set overall department direction, with special emphasis on legal, financial, policy and communication issues.
2. The ***Division of Business Management*** handles the day-to-day business of the department's enterprise, covering personnel, accounting, financial systems, workplace facilities management, and information technology.
3. The ***Division of Motor Vehicles*** registers vehicles, licenses drivers, administers motor vehicle laws, licenses dealerships, and administers a vehicle emissions testing program.
4. The ***Division of State Patrol*** enforces traffic laws, assists motorists, enforces motor carrier regulations, operates the State Patrol Academy, and aids local agencies dealing with natural disasters or civil disturbances.
5. The ***Division of Transportation Districts*** serves as the local community contact in the oversight of planning, designing, building, and maintaining the state trunk highway system.
6. The ***Division of Transportation Infrastructure Development*** creates effective processes, programs and standards to ensure the development and safe operation of Wisconsin's airports, harbors, highways, and railroads.
7. The ***Division of Transportation Investment Management*** conducts long-range, multi-modal transportation planning and guides the use of state and federal transportation dollars based upon research and data analysis of the state's transportation systems.

A = State Patrol Academy
H = Hill Farms (Central Office)
M = Motor Vehicle District Offices
S = State Patrol Headquarters
T = Transportation Districts

Who we are

Economic accomplishments

Looking back on a decade of progress

The Wisconsin Department of Transportation has a long track record of providing quality transportation for Wisconsin. By providing an effective and efficient transportation system, the department has helped Wisconsin's economy to prosper, its citizens to remain safe, and the environment to flourish.

The focus of the department is always the same, but the manner in how it accomplishes its goals may change. In particular, the department is using new technological advances, and achiving its accomplishments through a variety of partnerships and strong customer service.

Keeping a healthy economy in motion through a multimodal network

Quality transportation is a vital element for the health and future growth of the statewide economy. Wisconsin's manufacturers ship large quantities of freight in trucks, trains, ships and planes. Millions of commuters use highways and transit systems to get to work each day. Tourists spend nearly $7.7 billion in Wisconsin after arriving on trains, planes, boats and cars.

It's no coincidence that Wisconsin possesses one of the finest transportation networks in the country, and at the same time enjoys one of the most vibrant economies in the nation. Over the last decade, Wisconsin's state, federal and local partners, have recognized the vital link between the state's economic prosperity and a comprehensive, high-quality transportation system that can efficiently move both people and goods.

To keep Wisconsin's economy in motion as effectively and efficiently as possible, the state has made investments in all modes of transportation to provide all citizens and businesses with mobility choices.

Economic accomplishments

Highways

Wisconsin's highway network includes the 11,800-mile State Highway System, and over 100,000 miles of local streets and county roads.

Combined, Wisconsin highways handled nearly 57 billion vehicle miles of travel in 1999 – enough to make 800 round trips from the earth to the planet Mars!

The state invests heavily in maintaining its highways, and expanding the system where necessary, to ensure the smooth, uninterrupted flow of people and goods.

Since 1987, Wisconsin increased investment in the State Highway System by over 46% in real terms.

Corridors 2020

In 1987, Governor Tommy Thompson launched the Corridors 2020 initiative to create a 3,650-mile network of safe and efficient high volume highways to provide accessibility from all areas of Wisconsin to national markets.

Today, these and other major sections of the Corridors 2020 backbone are complete:

⇨ US 53 expansion from Chippewa Falls to Superior completed in 1999.

⇨ WIS 29 expansion from Green Bay to Chippewa Falls completed in 2000.

⇨ US 41 freeway conversion from Fond du Lac to Green Bay completed in 2000.

⇨ Major portions of US 151 from Fond du Lac to Dubuque are completed, with the remainder to be opened by 2005.

Local transportation

Local governments are a strong partner in providing transportation services. Recognizing this partnership, Wisconsin provides significant financial assistance to local governments for transportation.

- Almost 90% of Wisconsin's roadways are under local jurisdiction.
- In 1999, Wisconsin invested over $86 million in 68 public transit services which carried over 77 million passengers.
- Since 1987, local assistance and aids have increased by 56% – far outpacing the total transportation budget growth!

Over the past decade, the state has undertaken a number of initiatives to make local road, bridge and transit funding even more efficient and effective.

"Wisconsin's leaders have long recognized the link between a strong transportation network and the needs of business and economic development. By increasing our investment in transportation, and by targeting new and expanding businesses through the Transportation Economic Assistance program, we've been successful in spurring strong economic growth throughout the state."

Ron Fiedler
WisDOT Secretary, 1987-1991

Economic accomplishments

These range from the Local Road Improvement Program that aids facilities not eligible for federal aid, to the Congestion Mitigation and Air Quality (CMAQ) program, to Transportation Enhancements and others.

Transportation Economic Assistance (TEA) Program

Since 1987, Wisconsin has provided $47 million in TEA grants to fund improvements for over 200 new or expanding businesses. These road and rail improvements have helped create over 46,000 jobs.

Passenger rail

Wisconsin has experienced exciting growth in passenger rail.

Wisconsin successfully expanded the Chicago-Milwaukee *Hiawatha Service* in 1989, adding two round trips resulting in sharply increased passenger levels. The state negotiated to keep the *Hiawatha Service* in 1995 in the face of potential abandonment of the service.

About 420,000 passengers used the *Hiawatha Service* in 2000, averaging over 1,150 passengers per day, more than double the amount in 1988.

Freight rail

Wisconsin is home to 12 freight railroads operating over 4,500 miles of track. In 1998, these railroads combined to move over 1 million carloads – or 94 million tons – of coal, grain, paper, ore, lumber and other freight.

State investment has helped preserve rail service to small communities on over 600 miles of publicly-owned rail lines. Since 1986, WisDOT has awarded $104 million in loans and grants for freight rail improvements.

Airports

Aviation is an important element in keeping Wisconsin accessible to national and international markets.

Since 1986, Wisconsin has invested $500 million in state airport projects across the state. These investments have led to a tremendous pay back: aviation generates over $2.1 billion in economic activity *each year*!

Passenger enplanements at Wisconsin's airports rose from 2.9 million in 1987 to 4.5 million in 1999 – a 55% increase. State airports also handle 120,000 tons of air cargo each year.

Harbors

Annually, ports along the Great Lakes and Mississippi River handle about 50 million tons of freight with a value of more than $7 billion. Since 1986, WisDOT awarded $29 million for 33 commercial port improvement projects along the Great Lakes and Mississippi River.

Bicycle and pedestrian transportation

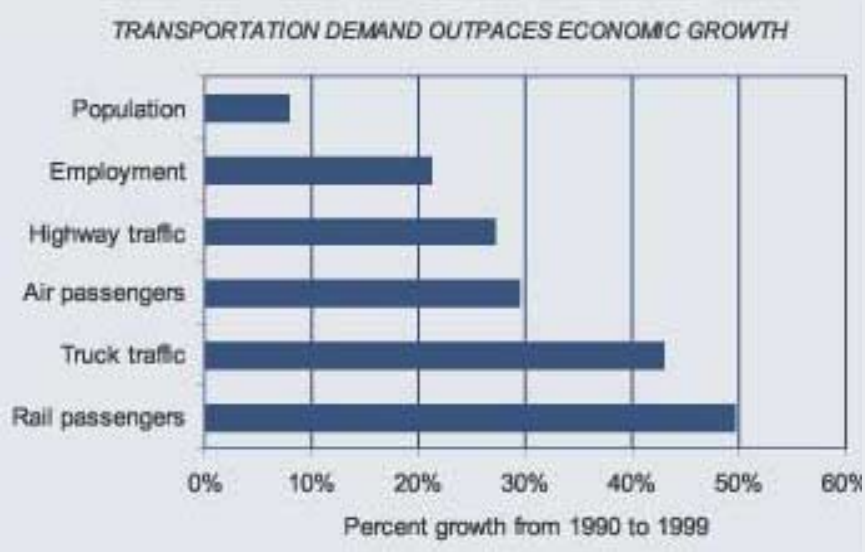
Bicycle and pedestrian traffic represent alternative transportation options, especially in urban areas, and for commuters or other travelers who do not own a motor vehicle. Bicycle and pedestrian facilities can also help increase the attractiveness of areas or communities for tourists and visitors.

Wisconsin implemented several federal programs, along with state-funded rails-to-trails efforts, to improve bicycle and pedestrian transportation.

Investing to keep up with demand

As Wisconsin's economy has grown, demand for transportation services has grown at even greater rates. In response, Wisconsin has invested heavily in its transportation system.

Since 1986, the state has made investments in its highway infrastructure worth $7 billion, resulting in improvements to over 9,100 miles of highway. Over this same period, Wisconsin's overall funding for transportation increased by 44% in "real" dollars, after accounting for inflation. These investments have increased the reliability, capacity and accessibility of Wisconsin's multi-modal transportation network to meet the growing demands of the state's business and recreational travelers.



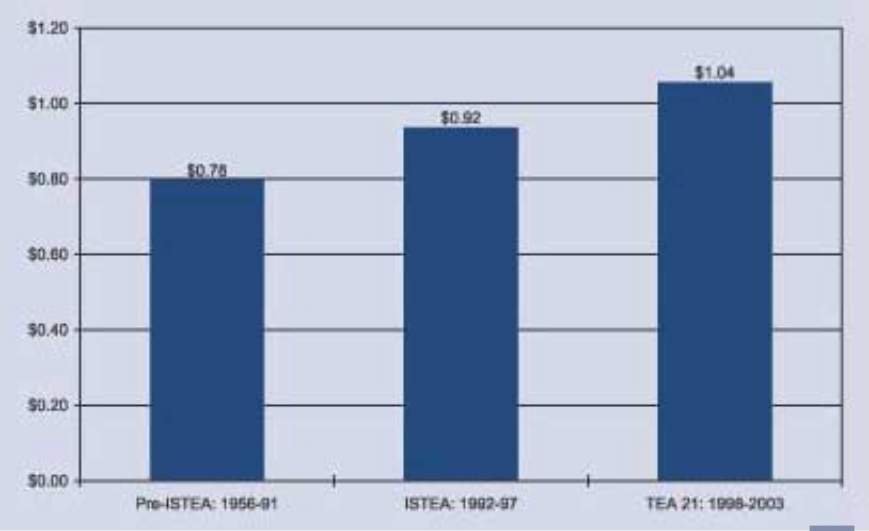
Safety accomplishments

Federal investment increases

A key factor in Wisconsin's increased investment in transportation is the availability of federal funds. By aggressively promoting the need for equitable transportation funding, the state has made great strides to increase federal support for transportation in Wisconsin.

Prior to 1991, the state received back only $0.78 for every dollar paid into the federal Highway Trust Fund. The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 increased the return to $0.92 per dollar. Finally, with the Transportation Equity Act for the 21st Century (TEA 21) passed in 1998, Wisconsin now receives slightly more than one dollar back for every dollar paid into the Highway Trust Fund.

Wisconsin increases its return on federal funds



Keeping Wisconsin highways safe

Wisconsin has been very successful in reducing the risk of traffic fatalities. The rate of traffic fatalities (measured per million vehicle miles of travel) has declined by 34% since 1986. Thus, even as traffic has risen dramatically in the past 15 years, the number of traffic deaths has remained relatively stable.

In absolute terms, Wisconsin had 757 highway fatalities in 1986, compared to 801 fatalities in 2000. However, other recent years had significantly lower fatalities: 744 in 1999, 709 in 1998, and 721 in 1997.

Wisconsin's success has been no "accident" -- a number of key initiatives and programs have contributed to safer roadways.

Seat belts

Studies consistently show that seat belts save lives. Since Wisconsin's safety belt use law went into effect in 1987, seat belt use increased from 26% to about 65%. The child passenger safety law, upgraded in 1992, requires children up to eight years old to be properly restrained.

Curbing drunk driving

Wisconsin's legal drinking age was raised from 19 to 21 in September 1986. Since then, the drinking-driver crash rate for 18-year-olds declined 63% while the rate for 19-year-olds declined 76%. A law that became effective in 1988 provided for prompt suspension of driver privileges for a minimum of six months for drivers whose blood-alcohol content tests at 0.10 or higher.

Wisconsin's increasingly tougher stance on drunk drivers has had tangible results. In 1986, 49% of traffic fatalities were alcohol-related; in 1999, it dropped to 36%.

The Pre-trial Intensive Supervision Program initiated in Milwaukee in 1993, and now active in 10 counties, has shown great promise as an effective tool to reduce OWI recidivism by getting offenders into monitoring, counseling and treatment as soon as possible after an arrest.

Educating young drivers

Wisconsin's Graduated Driver Licensing law was phased in during the year 2000. It provides young drivers the important experience they need in hopes of reducing the number of drivers and passengers ages 15-20 killed or seriously injured in motor vehicle crashes.

"Wisconsin can be proud of the tremendous progress that's been made over the last decade in designing and building a safe, high quality transportation network. With the ever-increasing number of motorists using our highways, it's more important than ever that we continue our collective efforts to promote safe and responsible highway travel."

Ernie Stetenfeld
Vice President of Corporate Relations,
AAA Wisconsin

Roadway improvements

Highway corridor safety programs are instituted on high traffic volume two-lane roadways throughout Wisconsin to enhance safety. State and federal highway safety dollars were used to increase signing, install pavement marking devices, provide better vision corners, install delineator signs and add wider pavement markings. These corridors have shown a reduction in fatal and serious injury crashes.

Longer-lasting, more highly reflective pavement markings are also enhancing highway safety, particularly for Wisconsin's growing elderly population.

Rail crossing safety

WisDOT works closely with the railroad industry to improve rail-highway safety. The department steadily increased funds to upgrade grade crossing warning systems and currently expends approximately $12.6 million annually.

Despite increasing rail and motor vehicle traffic, rail-highway crossing deaths in 1998 and 1999 were down 38% compared to the average annual total from 1990 – 1997.

Safety accomplishments

Environmental accomplishments

State Patrol and motor carrier enforcement

Safety is a key priority for the Wisconsin State Patrol. State troopers not only enforce traffic safety laws, but are also involved in drug interdiction and play a key role in the reconstruction of crash scenes. The state's 400 sworn troopers and 112 motor carrier inspectors play a vital role in ensuring public safety by enforcing laws and assisting stranded motorists.

Additionally, the State Patrol is upgrading its wireless communications systems, increasing efficiency for trooper communications when helping with motorist assists. The State Patrol also expanded its training academy. Beyond training State Patrol troopers, it now includes a regionalized Police Corps Training program to focus on local and county law enforcement, helping bridge the gap between state and local law enforcement initiatives.

New technology like Global Positioning Systems (GPS) helps troopers reconstruct crash scenes and route emergency medical helicopters to crash sites quickly.

Weigh-in-motion truck scales have reduced delays for truckers and improved comprehensive enforcement of weight laws – protecting highway infrastructure and enhancing public safety.

Preserving the environment

Wisconsin is recognized as a national leader in enhancing our transportation system, while preserving our state's environment and high quality of life. The department's comprehensive approach to environmental issues is to avoid environmental impacts whenever possible, minimize impacts to the extent practical and mitigate when they unavoidable.

Air quality

WisDOT's vehicle emission inspection and maintenance program, in place since 1984, conducts tests on about 750,000 vehicles each year, preventing an estimated 40,000 tons of auto-related emissions from ever entering Wisconsin's air annually.

Despite increases in population and travel, the amount of pollution emitted from personal vehicles in Wisconsin continues to decline. In 1990, highway sources accounted for about 40% of total emissions of volatile organic compounds (VOCs). By 1999, highway sources accounted for only 28% of total VOC emissions.

Environmental accomplishments

Thanks to increasingly restrictive standards, cleaner-burning fuels, and an aggressive vehicle inspection program, emissions from highway sources are expected to continue their downward trend.

Water quality

Wisconsin's erosion control standards are among the toughest in the nation in protecting water resources at airport, railroad and highway construction sites. State administrative rules have also been revised to address management of storm water runoff from transportation facilities.

In the last several years, WisDOT has been investigating the potential impacts of road salt on groundwater. To date, about 20 sites have been monitored by analyzing soil, water or vegetation samples.

Wetland banking

Wisconsin's wetland banking system is one of the first and most successful in the nation. Since July 1993, WisDOT has had an approved wetland mitigation banking program – an accounting system that tracks the type and acres of wetlands impacted by transportation projects.

Since 1990, for every acre of wetland lost to transportation-related construction, WisDOT has created or restored about 1.4 wetland acres. Between 1990 and January 1, 2000, WisDOT was involved in the restoration or creation of 2,249 wetland acres.

Noise abatement

WisDOT continues to work with local communities to design functional and aesthetically-acceptable structures that absorb traffic-generated noise.

The Wisconsin Noise Barrier Study, completed in 1990, identified 207 sites as eligible for retrofit noise barrier construction. So far, 19 barriers have been constructed costing about $11 million.

Historic preservation

Wisconsin has a rich Native American heritage. WisDOT has actively involved tribes to design transportation projects to minimize impacts on Native American sites.

Environmental accomplishments

The Rustic Roads Program preserves some of the state's most scenic and lightly-traveled roads for the enjoyment of motorists, bikers and hikers. Currently, 91 Rustic Roads wind through the state, spanning over 480 miles.

WisDOT also conducted a detailed survey of historic bridges throughout the state and actively works with local governments regarding the potential renovation and preservation of these historic structures.

Habitat

WisDOT mapped about 500 acres of native prairie-land areas along highway right-of-way. Plans are underway to preserve and enhance these areas in an effort to protect the rare plants and animals that live there.

Protecting one of these rare animals, the Karner Blue butterfly, led to creation of a national model for preserving an endangered species. WisDOT, in cooperation with the DNR and more than 20 other private and public entities in Wisconsin, helps manage thousands of acres of highway right-of-way to protect the Karner Blue's habitat.

Hazardous materials

Since the late 1980s, through its highway design and construction, WisDOT identified over 1,000 contaminated properties. These identifications resulted in environmental investigation or remediation, and removal of 500 leaking underground storage tanks.

WisDOT performs about 50 environmental assessments annually along highway right-of-way where potential sources of petroleum or hazardous waste contamination may occur.

Re-use of industrial by-products

Since 1986, WisDOT has successfully utilized over one million cubic yards of industrial by-products (coal ash and foundry sand) as a substitute for naturally-occurring native soils needed as fill for transportation-related construction projects. If piled onto a standard-sized football field, this amount of material would be over 475 feet deep.

Environmental benefits include a reduced need to extract native sand, gravel or soil for fill, and preservation of limited landfill space that would otherwise be needed to dispose of the industrial by-product.

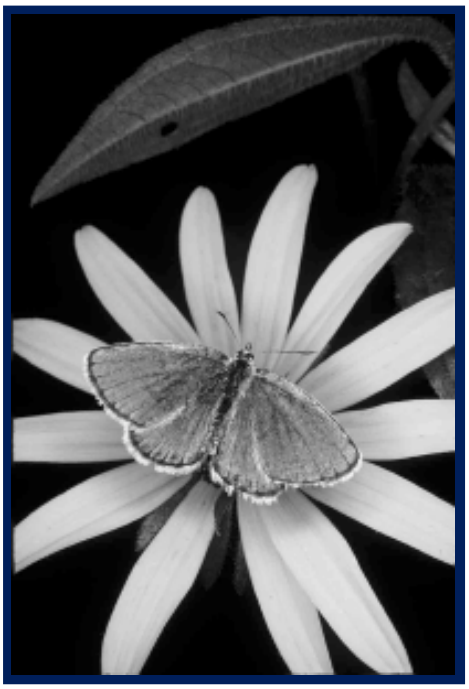


Photo by Thomas A. Meyer

Karner Blue butterfly

Ushering in new technologies

WisDOT is constantly seeking new solutions to transportation problems that maximize the effectiveness of investments and help utilize the existing system in a more efficient manner. Through research and deployment of new technologies, Wisconsin can ensure a high quality transportation system that meets the changing needs and demands of the future.

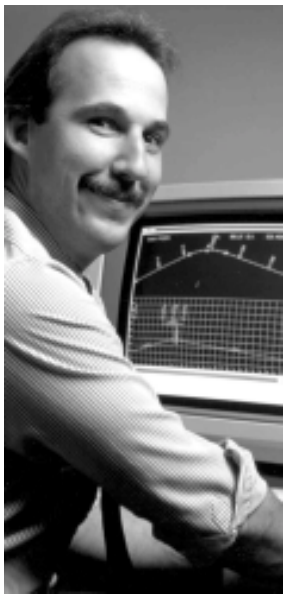
Intelligent Transportation Systems (ITS)

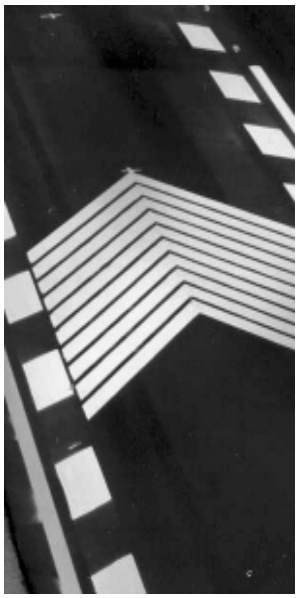
In 1990, southeastern Wisconsin began implementing cutting edge technology in traffic management with one of the country's first intelligent transportation systems (ITS).

Electronic pavement detectors and ramp meters help regulate the flow of traffic on freeways. Closed circuit television systems help law enforcement and emergency personnel monitor traffic incidents. Overhead message boards and Internet congestion maps help keep citizens well informed on traffic conditions.

Similar ITS products are now planned for deployment in Dane County, and other ITS devices will be deployed across the state to meet needs in both urban and rural areas.

Technical accomplishments





Global Positioning Systems (GPS)

GPS utilizes satellites to pinpoint the exact location and movement of vehicles, and is an important tool for highway maintenance crews, commercial vehicle operators, transit providers and emergency responders. Today, many personal vehicles are equipped with GPS that can provide directions to the motorist, or transmit location information to emergency personnel in the event of a crash.

On-board computers utilizing GPS are also being studied as a potential new approach to collecting transportation revenues. Wisconsin is one of ten states working with university researchers and the Federal Highway Administration to determine whether these technologies might be used to track the mileage of vehicles and then calculate a user fee based on actual roadway use.

GPS instrument approach procedures have greatly improved access to and use of Wisconsin's airports for both business and recreational purposes. The number of instrument landing systems has dramatically increased, allowing aircraft to land safely under difficult weather conditions. This technology has helped make airports more attractive to businesses and served as an economic boost for local communities.

Weather systems

Wisconsin has one of the nation's first statewide road weather information systems. The system collects data at 54 sites, including temperature, wind speed and other factors. Combined with weather forecasting information, the data helps road maintenance crews to more effectively combat winter storms.

Researching new ideas

Wisconsin's transportation research program combines state, federal, academic and industry resources to conduct cutting-edge studies. Such studies include those to reduce highway noise and make the most effective use of transit services to link low-income workers to jobs.

Through the national Strategic Highway Research Program, the state championed early research to test new highway pavements and technologies. A six-mile segment of Highway 29 is part of a living laboratory that has brought researchers from around the world to construct and study pavement test sections.

A new research program teams university researchers, the Federal Highway Administration, WisDOT and private associations to develop longer-lasting, cost-efficient highway products. The research program leverages private and public sector funds and will lead to the creation of a permanent Wisconsin Transportation Research Center.

WisDOT's Council on Research brings a multi-modal perspective to research by examining transit, motor vehicle, financing, and policy issues.

New pavements

In 1992, Wisconsin pioneered a new, longer-lasting asphalt called Superpave – a unique asphalt recipe now widely used throughout the state for its durability in the state's harsh climate. Wisconsin has also been a frontrunner in the use of high performance concrete pavements and innovative paving techniques such as ultra-thin whitetopping.

WisDOT's Traffic Operations Center (TOC)

Technical accomplishments

Focusing on the customer

Transportation in Wisconsin is more than just concrete and asphalt, buses and bikes, trains and technology. Direct service to people is a critical component in transportation, particularly for the Division of Motor Vehicles (DMV).

DMV workers across the state provide services to almost 50,000 customers every day. Each year, about 1.4 million license plates and 3.4 million vehicle registrations are issued. There are over 3.6 million drivers in Wisconsin who are tested and licensed.

WisDOT has undertaken many initiatives and offered new products to ensure that its customers receive the best service possible.

Providing service electronically

The electronic title and registration program allows dealers, financial institutions and other businesses to complete transactions for themselves and heir customers electronically. Participating agents issue regular auto and truck plates and stickers to the customer. There are many benefits of the program:

- ⇨ Faster and more convenient service for customers;
- ⇨ Better access to vehicle information for law enforcement agencies;
- ⇨ A reduction in the need for temporary plates;
- ⇨ A reduction in workload and traffic at DMV centers.

Wisconsin offers license plate renewal by touch-tone phone and the Internet with a credit card. Internet and phone use accounted for 283,000 renewals in the year 2000, representing more than 7% of all renewals, reducing the need for more costly over-the-counter service.

Testing made more convenient

Wisconsin teens no longer need to take a driver's knowledge test at a DMV center. Driver education instructors may now administer a knowledge test. With more than 150,000 tests conducted annually, this partnership provides more convenient service for customers and reduces the workload at DMV service centers.

In addition, private employers, agencies and individuals are now certified by WisDOT to administer commercial drivers skills tests. Approximately 150 independent testers now administer 82% of these tests, reducing WisDOT's workload and providing a more convenient alternative for many commercial drivers.

One–stop shopping for interstate motor carriers

To streamline services for interstate motor carriers, WisDOT has consolidated registration, fuel tax reporting, insurance filing, oversize/ overweight permitting and other services. WisDOT and industry partners enacted base-state agreements governing interstate fee payments – a concept adopted by Congress and used as a model for other states.

Measuring satisfaction

Implementation of a DMV Customer Satisfaction Index allows WisDOT to measure customer satisfaction in all service areas: telephone, in-person, mail and electronic. The index has risen more than 20% since its implementation in 1998 and has become a useful tool to compare performance and expectations, and to redirect resources to areas needing improvement.

Building partnerships

Solid partnerships established with public and private agencies around the state have greatly increased DMV's efficiency, while cutting costs, reducing workloads and providing additional services.

DMV productivity steadily increased between 1991 and 1998. Products issued to customers increased by more than 10% while hours worked decreased by more than 10%, due in large part to the excellent partnerships.

WisDOT partners with Envirotest Wisconsin, Inc., to conduct the vehicle emission inspection programs. Through this arrangement, inspections cost less than half of the national average for similar tests.

Firstar Bank handles the state's mail-in vehicle registration renewals and electronically updates vehicle records. Firstar handles well over three million registration renewals each year, accounting for about 75% of all registration renewals. The higher-cost renewals at customer service centers are now at 12%, down from 34% just a few years ago.

Working with many partners

WisDOT has accomplished much to ensure a safe, effective and efficient transportation system. However, the department by no means accomplished these tasks alone.

The high quality of Wisconsin's transportation system is the result of efforts by many partners who work with WisDOT every day in many different endeavors. These partnerships extend to both the public and private sectors, and demonstrate the teamwork that will be needed to ensure a top-notch transportation system for the future.

WisDOT's many partners

Contractors share the load and deliver the goods

Each year, WisDOT oversees around 400 construction projects on highways and bridges – a task complicated by Wisconsin's ever-changing climate and short construction season. Last year, 50% of all design and construction management work was "outsourced" to private contractors, allowing WisDOT to deliver an ever growing program.

In the 1990s, Wisconsin became one of the first states in the nation to incorporate a warranty specification in selected highway construction contracts. The warranty program gives contractors greater flexibility in the use of innovative materials and construction technologies. In return, they accept liability for future pavement performance - guaranteeing that a road will perform as promised.

The first warranted pavements in Wisconsin were built in 1995 and are now coming up for warranty review. Preliminary indications are the highways are performing as well as or better than pavements constructed under traditional contracts.

To ensure that all in the private sector can contribute to the transportation system, WisDOT has extended and increased opportunities to disadvantaged businesses and workers to participate in contracts.

Counties maintain the roads

Through a unique partnership with WisDOT, county highway departments perform the majority of general and winter maintenance activities. Approximately two-thirds of WisDOT's entire highway maintenance program budget is spent on county service.

This public-public partnership is one of only a few of its type in the country and helps ensure safe, year-round mobility while avoiding costly duplicative services.

Keeping roads beautiful

The Adopt-A-Highway Program utilizes community volunteers to collect recyclables and keep trash from accumulating along highways. In 1999, the 1,486 groups in the Adopt-A-Highway program removed 385 tons of litter from state highways.

Besides being unattractive, noxious weeds along highways can threaten native vegetation and agricultural crops. WisDOT has enlisted the help of private contractors to apply herbicides and pesticides, eliminating the need to retain workers certified in handling large quantities of chemicals.

Disabled workers maintain rest areas

Wisconsin's waysides and rest areas are nationally recognized for their high quality and scenic beauty. Disabled workers are employed by local Community Rehabilitation Programs to provide day-to-day maintenance at many of these facilites.

Along with ensuring the high quality of these roadside facilities, this program provides

employment for disabled individuals who may have limited opportunities.

Citizens provide input

Wisconsin works hard to make sure transportation investments meet citizen and community needs.

In 1994, WisDOT adopted a comprehensive transportation plan called Translinks 21. The planning process provided an unparalleled opportunity for the citizens of the state to be directly involved in shaping their transportation future.

WisDOT held close to 200 meetings throughout the state and talked to over 10,000 customers who shared their needs, priorities and ideas. Since then, WisDOT has asked stakeholders for help in developing additional plans for each transportation mode.

WisDOT is also seeking to provide additional opportnities for citizen input on transportation projects. A new approach seeks input at the start of a project's development to allow stakeholders to assess the needs and forward their own innovative solutions.

This model was successfully used to study improvements in the area of Madison's West Beltline and Verona Road and is currently being used to determine the best way to reconstruct the Marquette Interchange in Milwaukee.

WisDOT's many partners

Challenges lie ahead

A whole new set of challenges await the transportation system in Wisconsin. If transportation is still to be a contributing factor to a growing economy, then the state will need to preserve infrastructure, provide additional mobility options, address transportation funding needs, and improve the productivity of the department.

Where we're going

Preserving an aging system to meet future transportation needs

Wisconsin has been served well by its roads, railroads, runways, harbors and transit systems. However, many of these systems are reaching the end of their useful physical lives, and need to be rebuilt to ensure adequate service for the future.

Wisconsin is undertaking a number of statewide system plans for highways, rail, airports and other modes that identify key system preservation needs.

Wisconsin's State Highway Plan 2020 calls for $20.4 billion of investment in the State Highway System over 21 years. This funding will significantly reduce the number of pavement and bridge deficiencies throughout the 11,800 mile State Highway System.

The Wisconsin State Airport System Plan 2020 outlines $1.1 billion of improvements to airports statewide through 2020. This investment will ensure safe and efficient runway and taxiway facilities at dozens of airports in the state, allowing fast and convenient travel.

Southeast Wisconsin Freeway System

The southeast Wisconsin freeway system is probably the most significant preservation need in the state transportation system.

The seven-county, 305 mile system represents just a fraction of the 112,000-miles of state and local roadway, but has widespread impacts on the transportation decisions our citizens and businesses make each day. It is the "heart" of Wisconsin's transportation system, serving as a backbone for commerce and the lifeline for Wisconsin's thriving economy.

As the most heavily-traveled hub in Wisconsin's transportation network, its outdated designs raise serious safety concerns, while it's rapidly deteriorating condition threatens to dampen the economic vitality of our entire state. Most of this freeway system was built in the 1960s and is reaching the end of its useful life.

Major challenges loom in designing and financing the replacement of these freeways, while minimizing the construction impacts on the general public.

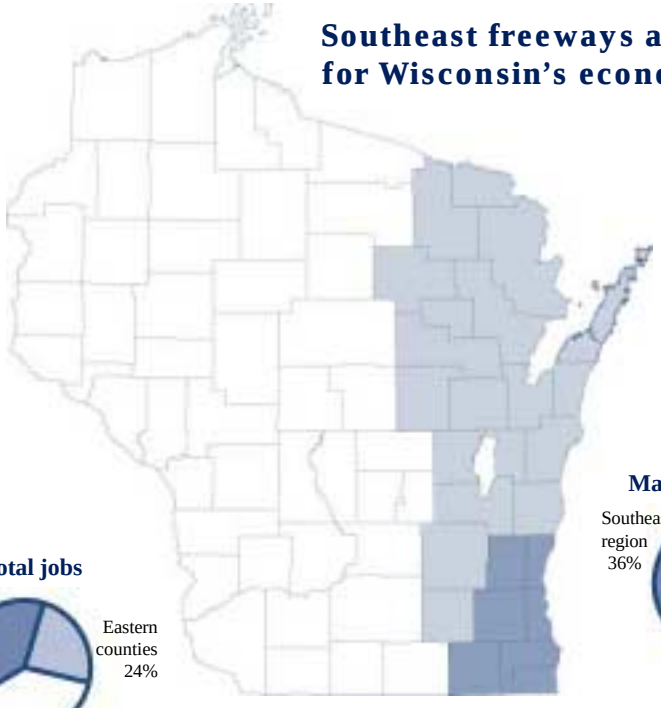
The estimated cost to replace the southeast freeway system is $5.4 billion or $270 million per year for 20 years. Costs to replace the Marquette Interchange alone range from $550 million to $950 million, depending on the options chosen.

Two separate, but inter-related studies are underway - one looking specifically at alternatives for the Marquette Interchange and the other taking a broader perspective of the entire southeast freeway system. Both studies will help develop a better understanding of the emerging freeway issues, map out reconstruction alternatives, and keep citizens informed about the ongoing process.

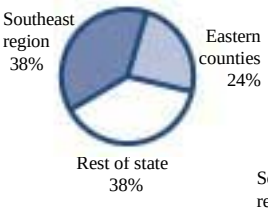
"We are fortunate here in Wisconsin to have a top-notch transportation network, coupled with forward-thinking state and local leaders who are committed to maintaining the quality of this system. The transportation challenges we face in southeast Wisconsin have economic implications for the entire state, and there's a growing realization that addressing these issues will require a collective, statewide effort."

Peter Beitzel
Vice President, Business Development
Metropolitan Milwaukee Association of Commerce

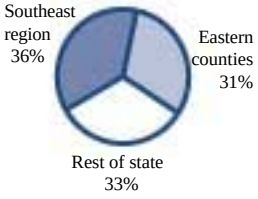
Southeast freeways are a gateway for Wisconsin's economy



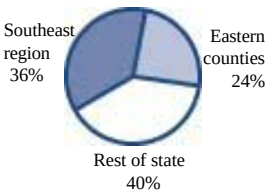
Total jobs



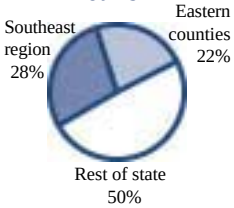
Manufactuing jobs



Population



Tourism



Where we're going

Providing new mobility choices

As the economy continues to grow and change, Wisconsin will need new transportation choices to meet a variety of mobility needs.

The socio-economic structure of society has changed greatly since much of the transportation system was originally built. Households are smaller and more numerous, "traditional" commuting hours and directions no longer apply, and the entire populace is more mobile.

One innovative program that seeks to meet new commuting needs is the Wisconsin Employment Transportation Assistance Program (WE-TAP). This joint program between the Wisconsin Department of Transportation and the Wisconsin Department of Workforce Development combines a number of federal, state and local funding sources into a single program.

In 2000, WE-TAP awarded over $6 million to provide lower income families with additional access to jobs, particularly through new transit options that provide "reverse commute" service from central cities to suburban job sites.

Wisconsin is also encouraging development of bicycling as a local transportation option. The State Bicycle Plan calls for a doubling in the number of bicycle trips in the state, while reducing crashes by at least 10% by 2010.

Forging a future for high-speed rail

Wisconsin is poised to take a leap forward into the future with the introduction of high-speed passenger rail service. WisDOT led a nine-state effort to identify the benefits and design an implementation plan for high-speed rail - resulting in the creation of the Midwest Regional Rail Initiative.

When completed, Midwest Rail will provide a 3,000 mile network of high-speed rail service, linking Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio and Wisconsin. The system will feature new trains with first class amenities to serve over 60 million residents in the Midwest. The network will connect business and leisure travelers to urban areas and smaller cities, providing an essential transportation link.

In Wisconsin, the first phase of Midwest Rail calls for 110 MPH rail service between Madison and Milwaukee, and continuing to Chicago, by the end of 2003. Eventually, service would be extended from Madison to the Twin Cities, and from Milwaukee to Green Bay.

Proposed Midwest Regional Rail System Map

The prospect of high-speed rail is solid in Wisconsin. In December of 1999, Governor Thompson's Blue Ribbon Task Force on Passenger Rail Service issued its interim report that endorsed the Midwest Rail plan for Wisconsin. In late 2000, the state purchased the Amtrak depot in Milwaukee and is undertaking a major renovation of the station.

Nationally, Wisconsin is a leader of the *States for Passenger Rail Coalition* that is pushing for a stronger federal funding role for passenger rail. Thanks in part to the coalition's support, the prospects for passage of a $12 billion federal program for high-speed rail are very strong.

Various communities in Wisconsin are also examining the potential for commuter rail service along existing train lines in Dane County and southeastern Wisconsin.

Where we're going

Financing Wisconsin's future

In 1997, the Transportation Finance Study Committee comprised of state lawmakers and transportation stakeholder representatives, concluded that Wisconsin should broaden its funding base and not rely so heavily on fuel tax and vehicle registration fee revenues to fund the majority of its comprehensive transportation network. The WisDOT Office of Policy and Budget is studying how other states finance transportation, and is looking at different options for Wisconsin in order to diversify the revenue sources that support our multiple transportation modes.

The recently completed State Highway Plan has helped focus attention on the long-term funding issue. The plan requires $5.1 billion more to implement than is projected to be available, under current funding mechanisms. Implementing the passenger rail recommendations and meeting the needs of the state's aviation system will also require additional funds.

All this implies that Wisconsin will have to work for more federal assistance, develop additional state revenue sources and consider providing local and regional governments revenue options to meet our growing transportation finance needs.

Finally, states like Wisconsin risk federal funding sanctions unless they comply with recently enacted federal legislation calling for a .08 blood-alcohol content as a national standard for drunk driving. If Wisconsin doesn't comply with the .08 mandate by 2004, it stands to lose about $9 million in 2004, with steadily increasing losses of up to $36 million in 2007.

Where we're going

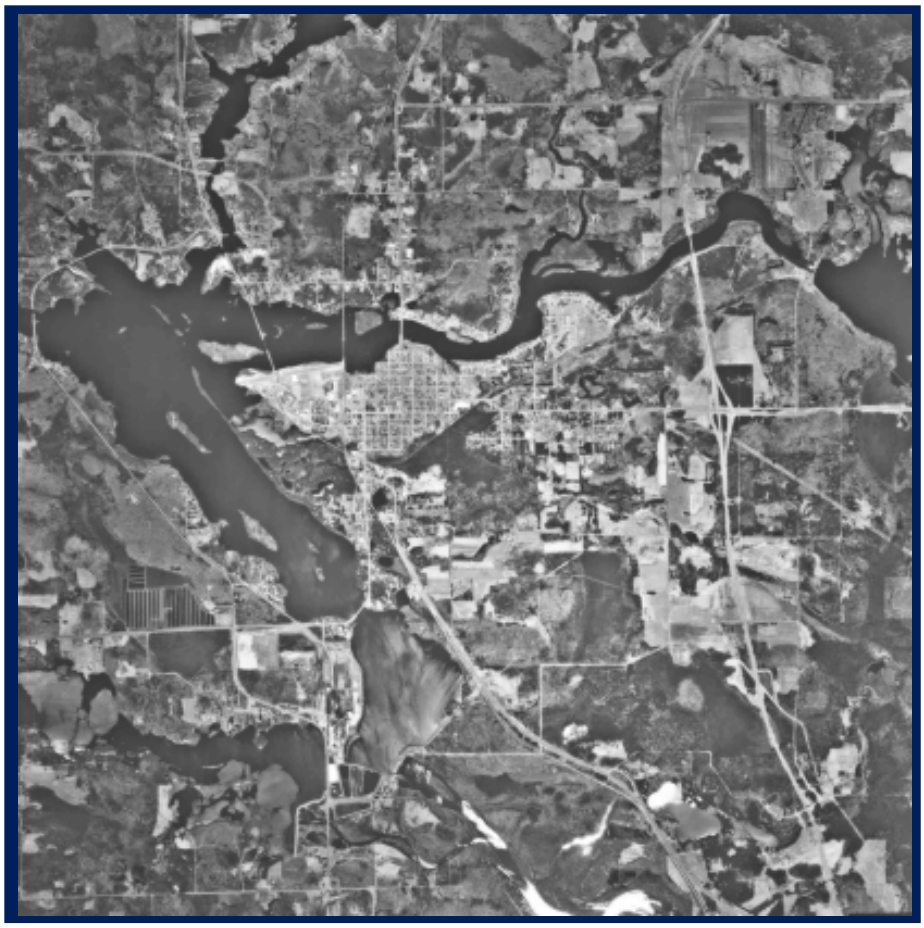
Improving productivity

WisDOT has a skilled, creative and dedicated work force -- a work force that has been able to deliver significantly more transportation products over the years while staying constant in size. In the future, the department will undertake a number of initiatives to ensure that the transportation community continues to have a productive and highly skilled work force.

Managing human resources

At the heart of maintaining a quality transportation system is the employment of a quality transportation workforce responsive to the needs and concerns of the citizens of Wisconsin.

In order to meet this need, WisDOT has created responsive and innovative ways to obtain the most highly qualified people to guide and manage one of the best transportation departments in the nation into the 21st-century. Through internship and repayment programs such as the Minority Engineering Program, the Loan Repayment Incentive Grant Program, the Aviation Careers Education Program, and the Summer Affirmative Action Internship Program, future employees have the ability to learn about rewarding transportation careers.



Tomahawk, WI

Through programs and committees such as the Career Opportunity Growth System, the Affirmative Action Advisory Committee, and the Training Advisory Council, current employees have the ability to explore different career paths and opportunities that exist and realize professional growth and advancement without having to look elsewhere.

This commitment to training helps the department maintain its quality workforce. Future initiatives include establishing a Corporate University, which will provide in-house training and education programs that align training and development issues with business strategies.

Technology is the future

In addition to the ITS and GPS advancements, WisDOT is continuing to investigate and implement new information technology initiatives.

One of the most far-reaching partnerships being implemented is the Wisconsin Local Roads (WISLR) Project. WISLR is a local/state partnership to create a database to incorporate key information on Wisconsin's local roadway system.

Technology will also aid in enforcement of motor carrier laws. One such technology, will allow for in-motion verification of truck credentials. This new option will free up the State Patrol to more efficiently target violators while letting most trucks proceed without significant delays.

Conclusion

Over the past decade, tremendous progress has been made in improving Wisconsin's transportation infrastructure and streamlining WisDOT's customer services. Maintaining this commitment to excellence will require bold and innovative thinking about how Wisconsin funds its comprehensive transportation network, with the realization that every dollar invested in the state's transportation system has a corresponding return in the form of enhanced public safety, economic prosperity, and preserving our overall quality of life.

For additional copies of this document, or for comments, questions or other requests, contact:

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April 2001

Mission

Provide leadership in the development and operation of a safe and efficient transportation system.

Vision

Dedicated people creating transportation solutions through innovation and exceptional service.

Emphasis areas

Maintain a quality workforce. The success of the department's programs relies on maintaining a well-trained and diverse workforce. The department must assess replacement and recruitment needs for the next five years and ensure that managers and staff experts provide the training, guidance, direction and mentoring necessary to lead the department to meet future needs. Employee initiative must be encouraged and recognized. While maintaining a high-quality workforce, we must seek and value the expression of diverse perspectives and foster an organizational culture that is tolerant, recognizes individual differences and actively recruits and prepares a diverse population for advancement.

Anticipate and Meet our Customers' Needs. As a public agency, our primary customers are the residents of Wisconsin, whose resources support our programs. The department must strive to understand what the public values and deliver products and services that reflect those values and meet needs. Although the needs of individuals should be considered, they must be balanced with those of society. The department will continue the implementation of performance measures in terms that are meaningful to our customers to further public accountability and enhance the efficient use of resources.

Increase Efficiency. We have an obligation to develop processes that result in cost-effective products and services for our customers. We must maximize the ability of the existing infrastructure to serve transportation demand. We must encourage teamwork and innovation. We must continually improve the management, evaluation and deployment of technology. We must monitor our costs and output and be responsible stewards.

Promote Transportation Safety. The department will use education, engineering, enforcement and regulatory tools to reduce crash, injury and fatality rates.

Foster a Comprehensive View of Transportation Needs. The mobility of Wisconsin's people and products depends upon an integrated transportation network offering modal choice. Recognizing the role of various transportation modes, we must promote their use where they are most appropriate. As we promote and implement modal options, our decisions will be balanced to reflect a wide range of societal values.

Strengthen Partnerships. In nearly every one of the department's programs, success is dependent upon both internal cooperation and the support, cooperation and efforts of people and organizations outside of the DOT. To best serve our customers, we must build and strengthen the partnerships within the department, with local governments and planning agencies, other state and federal agencies and private sector organizations. In each case, mutual and complimentary goals must be identified, understood and emphasized and working relationships improved.